user's manual

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NVDN-221V/IR
NVDN-201V/IR
NVDN-201D/IR

NOVUS®

INFORMATION

EMC (2004/108/EC) and LVD (2006/95/EC) Directives

CE Marking

Our products are manufactured to comply with the requirements of the following directives and national regulations implementing the directives:

- Electromagnetic compatibility EMC 2004/108/EC.
- Low voltage LVD 2006/95/EC with further amendment. The Directive applies to electrical equipment designed for use with a voltage rating of between 50VAC and 1000VAC as well as 75VDC and 1500VDC.

WEEE Directive 2002/96/EC

Information on Disposal for Users of Waste Electrical and Electronic Equipment

This appliance is marked according to the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC) and further amendments. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for used up electrical and electronic equipment for recycling purpose. For more information about recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

RoHS Directive 2002/95/EC

Out of concern for human health protection and friendly environment, we assure that our products falling under RoHS Directive regulations, regarding the restriction of the use of hazardous substances in electrical and electronic equipment, have been designed and manufactured in compliance with the above mentioned regulations. Simultaneously, we claim that our products have been tested and do not contain hazardous substances whose exceeding limits could have negative impact on human health or natural environment.

Information

The device, as a part of professional CCTV system used for surveillance and control, is not designed for self installation in households by individuals without technical knowledge.

The manufacturer is not responsible for defects and damages that result from improper or inconsistent with user's manual installation of the device in the system.

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SAFETY REQUIREMENTS

WARNING!

THE KNOWLEDGE OF THIS MANUAL IS AN INDESPENSIBLE CONDITION OF A PROPER DEVICE OPERATION. YOU ARE KINDLY REQUSTED TO FAMILIRIZE YOURSELF WITH THE MANUAL PRIOR TO INSTALLATION AND FURTHER DEVICE OPERATION.

WARNING!

USER IS NOT ALLOWED TO DISASSEMBLE THE CASING AS THERE ARE NO USER-SERVICEABLE PARTS INSIDE THIS UNIT. ONLY AUTHORIZED SERVICE PERSONNEL MAY OPEN THE UNIT

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INSTALLATION AND SERVICING SHOULD ONLY BE DONE BY QUALIFIED SERVICE PERSONNEL AND SHOULD CONFORM TO ALL LOCAL REGULATIONS

WARNING!

PRIOR TO UNDERTAKING ANY ACTION THAT IS NOT DESCRIBED FOR THE GIVEN PRODUCT IN USER'S MANUAL AND OTHER DOCUMENTS DELIVERED WITH THE PRODUCT, OR IF IT DOES NOT ARISE FROM THE USUAL APPLICATION OF THE PRODUCT, MANUFACTURER MUST BE CONTACTED UNDER THE RIGOR OF EXCLUDING THE MANUFACTURER'S RESPONSIBILITY FOR THE RESULTS OF SUCH AN ACTION.

IMPORTANT SAFEGUARDS AND WARNINGS

1. Prior to undertaking any action please consult the following manual and read all the safety and operating instructions before starting the device.
2. Please keep this manual for the lifespan of the device in case referring to the contents of this manual is necessary;
3. All the safety precautions referred to in this manual should be strictly followed, as they have a direct influence on user's safety and durability and reliability of the device;
4. All actions conducted by the servicemen and users must be accomplished in accordance with the user's manual;
5. The device should be disconnected from power sources during maintenance procedures;
6. Usage of additional devices and components neither provided nor recommended by the producer is forbidden;
7. Mounting the device in places where proper ventilation cannot be provided (e. g. closed lockers etc.) is not recommended since it may lead to heat build-up and damaging the device itself as a consequence;
8. Mounting the camera on unstable surface or using not recommended mounts is forbidden. Improperly mounted camera may cause a fatal accident or may be seriously damaged itself. The camera must be mounted by qualified personnel with proper authorization, in accordance with this user's manual;

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SAFETY REQUIREMENTS

9. Device should be supplied only from a power sources whose parameters are in accordance with those specified by the producer in the camera technical datasheet. Therefore, it is forbidden to supply the camera from a power sources with unknown parameters, unstable or not meeting producer's requirements;
10. Signal cables (conducting TV or / and telemetric signal) should be placed in a way excluding the possibility of damaging them by accident. Special attention must be paid to cables getting from the camera and connecting the power supply;
11. To avoid equipment damage, whole TV circuit should be equipped with properly made discharge-, overload- and lightning protection devices. Usage of separating transformers is advised;
12. Electric installation supplying the device should be designed to meet the specifications given by the producer in such a way that overloading is impossible;
13. User cannot repair or upgrade the equipment himself. All maintenance actions and repairs should be conducted only by qualified service personnel;
14. Unplug the camera from the power source immediately and contact the proper maintenance department when the following occurs:

- Damages to the power cord or to the plug itself;
- Liquids getting inside the device or exposure to strong mechanical shock;
- Device behaves in a way not described in the manual and all adjustments approved by the manufacturer and possible to apply by user himself, seem not to have any effect;
- Camera is damaged;
- Atypical behaviour of the camera components may be seen (heard).

15. In necessity of repairs attention to using only original replacement parts (with their parameters in accordance with those specified by the producer) should be paid. Non-licensed service and non-genuine replacement parts may cause fire or electrocution;
16. After maintenance activities tests should be run to ensure proper operation of all the functional components of the device.

Attention!
Technical changes reserved without prior notice and printing errors possible.

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FOREWORD INFORMATION

1. PACKAGE CONTENTS

Camera

Screws
3 pcs. NVDN-201D/IR
4 pcs. NVDN-221V/IR
NVDN-201V/IR

Allen key
(NVDN-221V/IR,
NVDN-201V/IR)

12VDC connector

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If any of the listed equipment has been damaged during transport or if the package is incomplete, the contents of package should be packed back in to the original box. Please contact your local NOVUS distributor for further assistance.

2. MAIN CHARACTERISTICS

- Mechanical IR cut filter
- IR operation capability
- Horizontal resolution: up to 700 TVL
- Min. Illumination:
  from 0.05 lx/F=1.2 (0 lx IR on) (NVDN-221V/IR)
  from 0.14 lx/F=2.0 (0 lx IR on) (NVDN-201V/IR, NVDN-201D/IR)
- Lens type:
  Varifocal 3.5~8 mm (NVDN-221V/IR)
  Standard, f=3 mm (NVDN-201V/IR and NVDN-201D/IR)
- 3-axis camera module adjustment
- Vandal-proof housing (NVDN-221V/IR and NVDN-201V/IR)
- Built-in IR LED
- IR LED current stabilisation, extending LED lifetime and preventing damage
- 12VDC Power supply

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FEATURES AND SPECIFICATION

3. SPECIFICATION

MODEL	NVDN-221V/IR	NVDN-201V/IR	NVDN-201D/IR
IMAGE			
Pick-up Element	1/4" CMOS imager		
Number of Effective Pixels	720 (H) x 576 (V)		
Horizontal Resolution	650 TVL - color mode 700 TVL - b/w mode		
Min. Illumination	0.05 lx/F=1.2 0 lx (IR on)		0.14 lx/F=2.0 0 lx (IR on)
S/N Ratio	>46 dB		
Electronic Shutter	Auto: 1/50 s ~ 1/100 000 s		
LENS			
Type	Varifocal, f=3.5 ~ 8 mm, F=1.4	Standard, f=3 mm, F=2.0	
Angle of view (H)	57° ~ 26°	63°	
DAY/NIGHT			
Type	Mechanical IR cut filter		
Switching Mode	Auto		
Visible Light Sensor	Yes		
IR LED			
Number	36	24	18
Range	25m	15m	
Angle	80°		
INTERFACES			
Video output	BNC, 1.0 Vp-p, 75 Ohm		
INSTALLATION PARAMETERS			
Dimensions (mm)	100 (H) x 119 (Ø)	75 (H) x 93 (Ø)	75 (H) x 93 (Ø)
Weight	790 g	330 g	170 g
Enclosure	Vandal proof, aluminium, ivory		Plastic, white
Power Supply	12 VDC +/- 10%		
Power Consumption	5.2 W	3.2 W	3 W
Operating Temperature	-30ºC ~ 40ºC		
Degree of Protection	IP 65		-

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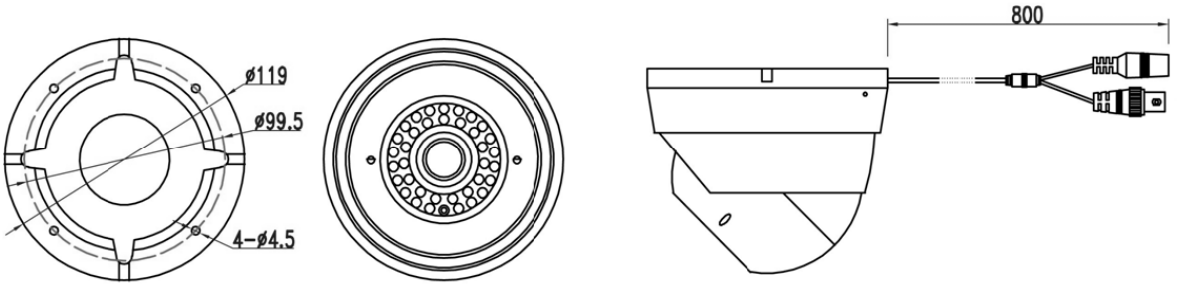
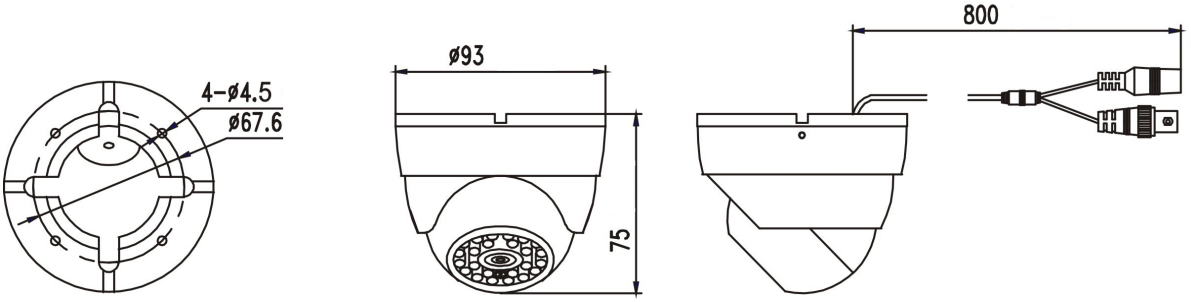
SPECIFICATION

3.1 Dimensions:

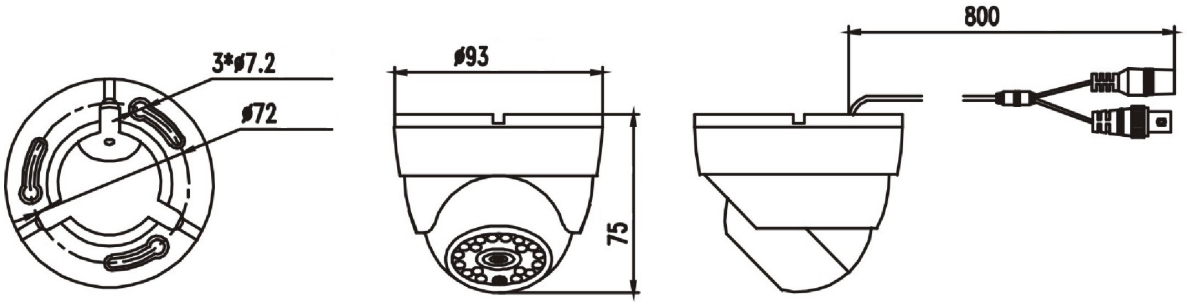
NVDN-221V/IR



NVDN-201V/IR



NVDN-201D/IR



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INSTALLATION

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3.2 Layout of important camera items:

NVDN-221V/IR

NVDN-201V/IR and NVDN-201D/IR

4. INSTALLATION

Please familiarize yourself with the device, its parameters and methods of mounting, before mounting .

- Put base of the camera, as a mounting template, to the wall or ceiling and mark drill holes.
- Drill holes using markings.
- Drill additional hole for video and power cables.
- Put video and power cables through a hole in the base of the camera.
- Using mounting screws from the package attach the base of camera to the ceiling/wall.
- Put video and power cables through a previously drilled hole in the wall/ceiling.
- Put dome cover on the camera and gently screw the stopping ring onto the base of the camera.
- Manually point the camera in a desired direction to obtain a desired scene view.
- Screw the stopping ring firmly (holding the camera with hand if needed) (NVDN-221V/IR and NVDN-201V/IR).
- Attach the stopping ring tabs to the base of the camera. (NVDN-201D/IR).
- Secure the base-ring joint by counter-screw (NVDN-221V/IR and NVDN-201V/IR).
- In NVDN-221V/IR camera please adjust zoom and focus if needed using adjustment screws. It is recommended to check focus settings in infrared illumination and make correction in color mode to have proper focus in both modes.

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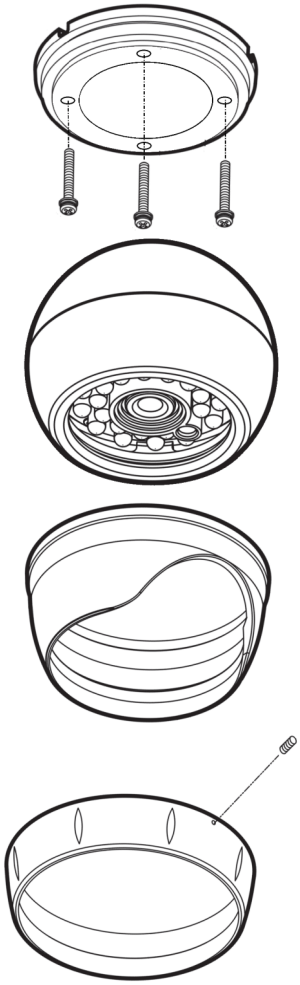
INSTALLATION

NVDN-221V/IR and NVDN-201V/IR



Base of camera

Mounting screws

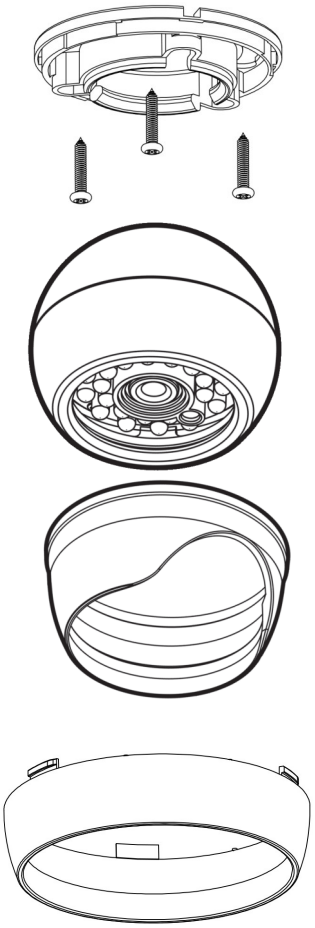
Camera

Dome cover

Counter screw

Stopping ring

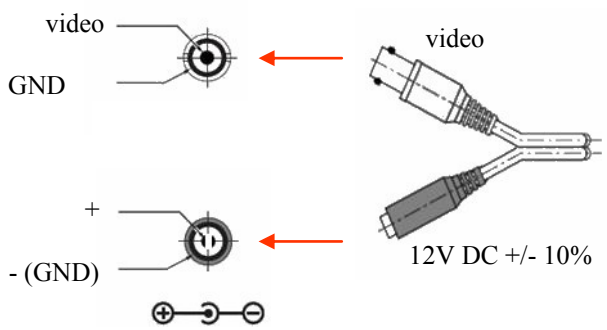
NVDN-201D/IR



4.1 Power supply connection

Warning: Device should be supplied only from a power sources whose parameters are in accordance with those specified by the producer in the camera technical datasheet. Therefore, it is forbidden to supply the camera from power sources with their parameters unknown, unstable or not meeting the producer's requirements.

See the power supply terminal connections below.



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